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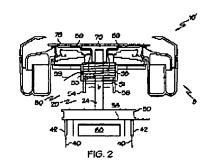
REMARKS

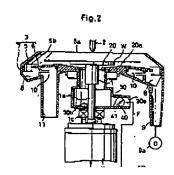
Claims 37-38 and 43 have been rejected under 35 U.S.C. §112, first paragraph. By the present amendment, these claims have been canceled to advance prosecution.

The sole remaining independent claim (claim 36) has been rejected as being unpatentable over Sugimoto et al. in view of Kimura. Claim 36 recites, inter alia, a heat regulating element defining an "open framework." The Office Action acknowledges correctly that applicants have argued that Sugimoto does not present an open framework but sustains the rejection based upon the reasoning that the teachings of Sugimoto are "deemed equivalent to the claimed heat regulating element" absent a showing by applicant that the open framework "avoids degradation of the gas profile."

Thus, the Office Action places the burden on the applicants to present performance data to support their assertion that the claimed "open framework" differs from the Sugimoto configuration. However, as the PTO recognizes in MPEP §2142, the office bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the office does not produce a prima facie case, the applicant is under no obligation to submit evidence of non-obviousness. In the present context, the clear distinctions between the two configurations are readily apparent on their face.

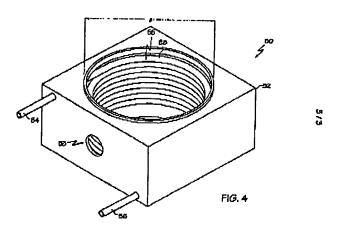
Specifically, in the illustrations presented below, Fig. 2 of the present application (presented on the left below) illustrates an example of a "heat regulating element defin[ing] an <u>open framework</u> arranged about said rotary spindle such that upper and lower ends of said heat regulating element are open to said substantially cylindrical heat regulation void from said lower spindle area to said upper spindle area (see claim 36)." In this manner, the heat regulating element 50 permits "flow of exhaust gases from said lower spindle area beyond said lower end of said heat regulating element through said upper spindle area beyond said upper end of said heat regulating element (see claim 36)."



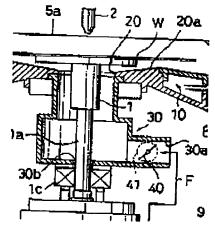


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In contrast, Fig. 2 of Sugimoto (presented on the right, above) clearly shows an air supply conduit 30 closed at its upper end in the upper spindle area and at its lower end in the lower spindle area. Indeed, the conduit is open only through a controlled inlet 30a laterally displaced from the spindle 1a. Fig. 4 of the present application, presented below, further illustrates an open framework heat regulating element 50 according to the present invention:



The upper and lower ends of the element clearly define open, non-constrictive passages for exhaust gas flow. In contrast, the conduit 30 of Sugimoto is sealed against the air flow guide surface 20a at its upper end and is closed at its lower end, receiving air flow only through the inlet 30a.



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Accordingly, applicants submit that the reference clearly fails to teach or suggest the structure claimed. Further, the Office Action does not refer to any teaching, motivation, or suggestion for moving from the conduit of Sugimoto to the open framework of the present invention. Indeed any such suggestion would be contrary to the teachings of Sugimoto, where the conduit 30 is intentionally closed and placed into sliding contact with the lower end of the spindle 1a.

The assertion in the Office Action requiring the applicants to provide performance data showing that the open framework is operationally superior to the closed conduit of Sugimoto is clearly misplaced. The burden is on the office to present a prima facie case of anticipation or obviousness by showing that each and every element as set forth in the claim is found in or suggested by the prior art. In the present case, the primary reference relied upon in rejecting claim 36 fails to teach the open framework. Further, none of the cited art suggests modification of the Sugimoto conduit in such a way as to arrive at an open framework.

Accordingly, applicants respectfully submit that, in view of the above amendments and remarks, the application is now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
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